

7028

550

U.S. Coast & Geodetic Survey

WIRE DRAG

1222-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Wire Drag

Field No. We-Hi 4144 Office No. H - 7028

LOCALITY

State Virginia

General locality Lower Chesapeake Bay

Locality Cape Henry To Thimble Shoal L.H.

1944-45

CHIEF OF PARTY

L.C. Johnson & J.H. Brittain

LIBRARY & ARCHIVES

DATE SEP 5 1945

B-1870-1 (1)

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PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3(a), EXECUTIVE ORDER 12356.

7028

WIRE DRAG

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO.

H7028 WIRE DRAG

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-7028

Field No. WA-HI 4244 - (Wire Drag)

State Virginia

General locality Lower Chesapeake Bay

Locality Cape Henry to York Spit
Thimble Shoal L. H.

Scale 1:40,000 Date of survey Oct., 1944 - April, 1945

Instructions dated September 12, 1944

Vessel WAINWRIGHT & HILGARD

Chief of party L. C. Johnson & John H. Brittain

Surveyed by Above

Soundings taken by fathometer, graphic recorder, hand lead, wire

Protracted by M.E. Byrd

Soundings penciled by M.E. Byrd

Soundings in fathoms feet at MLW MLLW

REMARKS: This sheet was processed in the Hydrographic Section of the S.E.

District, Norfolk, Va.

DESCRIPTIVE REPORT

to Accompany

WIRE DRAG SHEET WA-HI 4145

U. S. C. & G. S. Launch WAINWRIGHT

- L. C. Johnson, in charge

U. S. C. & G. S. Launch HILGARD

- J. H. Brittain, in charge

AUTHORITY:

This wire drag survey was executed under Instructions, Project CS-313, dated September 12, 1944.

LIMITS:

This survey comprises a wire drag survey over charted obstructions in the southern part of Chesapeake Bay south of the entrance to the York River and between the Virginia Capes and Thimble Shoal L. H.

SURVEY METHODS:

The wire drag was accomplished with the Launches WAINWRIGHT and HILGARD as drag launches and launch 101 as tender.

Standard dual control methods were used. The drag strips were controlled by three point sextant fixes on shore signals or buoys. Lift was determined on most sections of the drag by tests taken from the tender, using a graduated rod coated with a mixture of white lead and tallow, and suspended from a float by means of a graduated stranded 1/8" wire.

CONTROL:

Most of the signals used on this survey are located by triangulation. Topo signal "Count" was the tower on the bridge across Lynnhaven Creek, located by graphic control in 1941 by a party from the Ship OCEANOGRAPHER. Signal "Stack" was taken from Chart 481. It is believed that this signal was located by Captain P. C. Whitney. Several navigation buoys were used on item 10. These were located by three point fixes on shore objects.
(N. counterbalance)
7-2820 (1944)
ST. L. VES. (1944)
recorded in FE #2, 1948

COMPARISON WITH CHARTS 481 and 1222:

The purpose of this wire drag survey was to determine least depths over various charted obstructions. However, it was noted that drag depths in areas in the immediate vicinity of the obstructions agreed very well with charted soundings.

The following items shown on the copy of chart 1222 accompanying the Instruction for this project were dragged:

ITEM 7:

No evidence of this obstruction was found. An area of 1/2 mile radius from the charted position was dragged. $\phi 36^{\circ}59'05''$ $\lambda 76^{\circ}03'-04''$ *Obstruction disproved*

ITEM 8:

No evidence of this obstruction was found. An area of 1/2 mile radius from the charted position was dragged. $\lambda 37^{\circ}01'00''$ $\lambda 76^{\circ}02'44''$ *Obstruction disproved*
Reported obstruction was a pontoon

ITEM 9:

No evidence of this obstruction was found within 1/2 mile radius of its charted position. However, in Latitude $37^{\circ}01.2'$, Longitude $76^{\circ}10.3'$, approximately 0.6 miles northeast of the charted position, in general depths of 18 to 20 feet, the drag hanged at 15 1/2 feet and cleared at 15'. The least depth found with the hand lead in the area was 17 ft. $\phi 37^{\circ}00'47''$ $\lambda 76^{\circ}11'03''$ *Obstruction disproved*

Reported obstruction was struck by vessel drawing 10 ft.

(Con't.)

Item No. 10:

(soundings)

φ 37-08-32" λ 74-12'-00"

Additional work in this area was accomplished by the Ship
CCWIE in August 1945 and no obstruction was found. See
Sheet Hi-4045 (Add. work)(Field Number).

FE #2, 1945 part 2

Obstruction disproved

8-30-45
fwj

ITEM 10:

No evidence of this obstruction was found. Fish traps and navigation buoys prevented dragging to a full 1/2 mile from the charted position to the northwest and to the southwest. *dragged 4 1/2 mile*
 $\phi 37^{\circ}08'32''$ $\lambda 76^{\circ}12'00''$

ITEM 20:

This item was the wreck of the ship "CHILORE". This had previously been demolished to a reported least depth of 40 ft. The first drag work in this area gave a hang up at 31 1/2 ft. with a clearance of 30 ft. Further demolition work was then done and the area dragged again with the following results: On March 23, "P" day, drag cleared at 37.5 ft., hanged at 42.0 ft. March 24, "Q" day, a hang at 40.5 ft. and at 38.5 ft. ~~and 40.0 ft.~~ March 28, "R" day, a hang at 42.0 ft., March 29, "S" day, a hang at 38.5 and 40.0 ft. and a clearance at 39.0 ft. This discrepancy was undoubtedly due to the fact that the lift was not uniform throughout the drag. The effective depth of drag was determined by the maximum in any one section for the drag. It is recommended that the wreck be considered cleared to 37.5 ft. It is further recommended that all drag strips over this wreck run prior to March 23 be rejected. *39 ft. clearance not used*
logged
strips rejected

In connection with item 20 the area around Latitude $36^{\circ}57.0'$, Longitude $76^{\circ}01.3'$ where an examination vessel was sunk, was dragged to 1/2 mile radius as far as possible. The presence of the examination vessel to the southward prevented getting 1/2 mile in that direction. The vessel could not be readily moved on account of a large mooring anchored with 4 heavy anchors. The area was dragged to a minimum of 49 1/2 feet without a hang up. In addition some hydrography was run without finding anything. The Commanding officer of the present examination vessel stated that he was on station when the wreck was demolished. He gave the position where the demolition was carried out as approximately 500 yards north of the position of the present examination vessel. This position agreed with that of the charted position of the wreck, *this wreck is disproved and is no longer charted*
1/2 mile

In further connection with item 20 an obstruction was located in Latitude $36^{\circ}57.6'$, Longitude $76^{\circ}01.3'$. This was cleared with 37 feet when located. This was identified by the Navy divers as the wreck of the pilot boat, "CARMINE" lost in December, 1938. The house on this wreck was blown off in March, 1945, and dragged again on March 23 and 24, with a hang at 42.0 ft. and a clearance of 40.0 ft. It is recommended that the clearance of 40.0 be accepted.

There are strong currents in the vicinity of item 20 and the two additional wrecks, making it necessary to do most of the dragging around slack.

ITEM 21:

No evidence of this obstruction was found. It was impossible to drag the area to 1/2 mile radius on account of fish traps. $\phi 36^{\circ}55'23''$ $\phi 76^{\circ}04'38''$
Wreck of A. ERNEST MILLS from H-4924 (1929) and Ch L 5 (1918)
Wreck not disproved.

TIDE:

Tides for this survey were furnished by the Washington office. They were taken from the gage at the Naval Operating Base and corrected for this area.

Respectfully submitted,

John H. Brittain
 John H. Brittain
 Officer in Charge
 Launch HILGARD

13.1 Total Sq. Stat. Mi. dragged

STATISTICS

Date	Day	Stat. Mi. Drag Strips	No. Pos.	No. Sdgs.
1944				
Oct.				
18	A	4.0	44	0
19	B	1.1	14	0
23	C	4.6	55	0
24	D	6.3	43	0
30	E	5.7	56	0
31	F	4.2	33	1
Nov.				
1	G	2.3	17	2
13	H	1.5	13	0
15	J	2.6	31	0
23	K	1.7	20	0
Dec.				
20	L	211	9	0
1945				
March				
12	M	1.7	19	0
13	N	1.0	5	0
23	P	2.5	23	0
24	Q	1.0	15	0
28	R	2.2	17	0
29	S	2.4	16	0
30	T	2.9	19	0
Apr.				
3	U	3.7	33	0
4	V	0.9	6	0
9	W	2.0	14	0
		<u>56.4</u>	<u>502</u>	<u>3</u>

A D D E N D U M

to accompany

WIRE DRAG SHEET NO. H-7028 (Field No. Wa.Hi. 4144)

Hydrographic Signal "NEW" $\phi 37^{\circ} 08.88'$
 $\lambda 76^{\circ} 12.15'$

The smooth sheet and boat sheet locations of this signal do not agree. Its smooth sheet position is approximately 80 meters north of that shown on the boat sheet. *Smooth sheet position accepted as correct.*

Latitude $37^{\circ} 08.8'$ and Longitude $76^{\circ} 11.7'$. Drag Strip 1 - 8 U (Red). There is a momentary grounding of $34\frac{1}{2}$ feet between positions 5 and 6 U (red). This grounding is indicated in pencil on the smooth sheet. *grounding omitted - agrees with charted depths*

Latitude $37^{\circ} 01.1'$ and Longitude $76^{\circ} 10.2'$. *Grounding of $15'$ on $36^{\circ} E$ cleared by $14\frac{1}{2}'$ obtained at this position*
At position 27 E (red) a grounding was obtained by a wire drag strip whose effective depth was 19 ft. A lead line sounding (1 e red) taken at this grounding shows a depth of 20 feet. *Plotted on overlay in Descriptive Report*

Item No. 20:

The work covered by this item is shown on the smooth sheet and overlays Nos. 1, 2 and 3. *Acceptable information from overlays 1, 2 & 3 was plotted on smooth sheet and overlays destroyed*

The smooth sheet shows,

A. Before final demolition

Strips ~~23~~ to ~~33~~ A and 1 to ~~11~~ K. *These strips in an area not affected by demolition were retained*

B. After final demolition

All strips from 1 P to 4 S.

Overlay No. 1 shows,

Strips 5 S to ~~19~~ ^{16 S} *T day plotted on smooth sheet 5-16 S not used because of inaccuracy in lift.*
(This comprises all work done after March 23, 1945, which could not be clearly shown on the smooth sheet.)

Overlay No. 2 shows,

Strips 1 A to 22 A	Strips 6 C to 11 C
Strips 34 A to 43 A	Strips 18 C to 24 C
Strips 1 B to 10 B	Strips 4 G to 10 G
" 11 K to 11 K	Strips 14 G to 17 G

(This overlay comprises work done before March 23, 1945, which also could not be clearly shown on the smooth sheet.)


Overlay No. 3 shows,

Strips 11 to 14 B
Strips 1 to 5 C

Strips 12 to 17 C
Strips 25 to 41 C

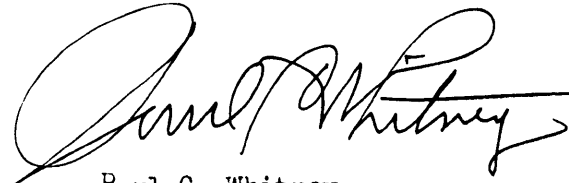
(This overlay comprises work done previous to March 23, 1945, and should be discarded as this area is adequately covered by the wire drag strips shown on the smooth sheet and overlays Nos. 1 and 2.) *overlay discarded*

Respectfully submitted,


Isadore M. Zeskind
Cartographic Engineer

Norfolk, Va.
August 29, 1945.

Approved & Forwarded


Paul C. Whitney
Supervisor, SE District

LIST OF SIGNALS
SHEET H-7028

Triangulation Stations

(BET) GRANITE B, U.S.E. 1939
CAPE CHARLES NEW L.H., 1887, 1932
CAVALIER HOTEL CUPOLA, 1929
FOX HILL MUNICIPAL W.T., 1939
GRANITE TOWER A (U.S.E.), 1925, 1939
CAPE HENRY L.H. 1887, 1932
HYGEIA INN, 1929
LITTLE CREEK, 1929
CASEMATE (U.S.E.), 1939
MOORE, 1943
GRANITE TOWER C (U.S.E.) 1939
(OLD) BACK RIVER L.H. 1852, 1932
PARCEL C TOWER A, (U.S.E.), 1939
THIMBLE SHOAL L.H. 1919 - 1935
EMERSON A, (U.S.E.) 1925, 1939
RADIO TOWER, 1941
CHAMBERLAIN VANDERBILT HOTEL W. TOWER, 1932
YORK SPIT L.H. 1900, 1932

Topographic Stations

Count
Stack

Hydrographic Stations

Boo
Kay
New
Trap

from FE #2 (1945) RDG

2400M

TIDE NOTE FOR HYDROGRAPHIC SHEET

March 21, 1946

~~Division of Hydrography and Topography:~~

Division of Charts: H. W. MURRAY

Plane of reference approved in
9 volumes of ~~sounding records~~ for
wire drag volumes

HYDROGRAPHIC SHEET 7028 WD

Locality Lower Chesapeake Bay

Chief of Party: L. C. Johnson and J. H. Brittain in 1944-1945.
Plane of reference is mean low water, reading
3.6 ft. on tide staff at Hampton Roads (Naval Operating Base)
13.4 ft. below B. M. 6 (1927)

Height of mean high water above plane of reference is 2.5 feet.

Condition of records satisfactory except as noted below:

B. H. Green
Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES

Survey No.

H-7028 (Wire Drag)

Name on Survey

	A	B	C	D	E	F	G	H	K	
<u>Virginia</u>		(for title)							USGB	1
<u>Chesapeake Bay</u>		(for title)							"	2
<u>Thimble Shoal Lighthouse</u>		(for title)								3
<u>Cape Henry</u>										4
<u>York Spit</u>										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
<u>Hampton Roads (Naval Operating Base)</u>										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

by L. Heck on 9/17/47

(location of tide staff)

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H7028**

WIRE DRAG

Records accompanying survey:

Boat sheets 2...; sounding vols.; wire drag vols. .9...;
bomb vols.; graphic recorder rolls;
special reports, etc.
..... 1 A & D Sheet, and 3 Overlays & other tracings

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	502
Number of positions checked	81
Number of positions revised	30
Number of soundings recorded	3
Number of soundings revised (refers to depth only)	0
Number of soundings erroneously spaced	—
Number of signals erroneously plotted or transferred	0
Topographic details	Time 5 hrs.
Junctions	Time 0
Verification of soundings from graphic record	Time —

Verification by R. D. Goodrich Total time 89 hrs. Date 8/22/47

Review by R. H. Carstens Time 29 Time 29 Date 9/17/47

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7028 Wire Drag
(1944-45)

FIELD NO. WA-HI 4144

Virginia, Chesapeake Bay, Cape Henry to York Spit
Surveyed October 1944 to April 1945 Scale 1:40,000
Project No. CS-313

Soundings:

Control:

Handlead

Sextant fixes on shore signals

Chiefs of Party - L. C. Johnson and J. H. Brittain
Surveyed by - L. C. Johnson, J. H. Brittain, C. J. Wagner and H. L. Proffitt
Protracted by - M. E. Byrd
Soundings plotted by - M. E. Byrd
Verified and inked by - R. D. Goodrich
Reviewed by - R. H. Carstens, September 17, 1947
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline and signals are from T-8301, 8302, 8303, 8314 of 1942-44 and T-6820 (1941). Signal Stack is from chart letter 453 (1944); supplementary hydrographic signals are from F.E. 2, 1945.

2. Adjoining Surveys

The present survey covers detached areas and joins no other wire drag surveys.

3. Comparison with Contemporary Surveys

F.E. 2, 1945
H-7089 (1946)
H-6962 (1944)

There are only minor differences between the effective depths of the present survey and soundings from F.E. 2, 1945 in the vicinity of Lat. 37°-08.5', Long. 76°-12.0'.

Present effective depths are in harmony with soundings from H-7089 (1946) in the vicinity of Lat. $36^{\circ}-55.5'$, Long. $76^{\circ}-05.0'$. 43 ft. carried fwd. to H-6962 in lat. $36^{\circ}56.7'$, long. $76^{\circ}02.08'$ from present survey. Otherwise, no conflicts between depths on H-6962 and eff. drag depths on pres. survey. There are no contemporary surveys in other areas covered by the present survey.

4. Comparison with Chart 481 (Latest print date March 31, 1947)
Chart 494 (Latest print date August 10, 1946)

a. Hydrography

Charted depths are in harmony with the effective depths of the present survey, except for minor differences.

(1222)
Mention is made of the 50-foot sounding (Chart 481) in Lat. $36^{\circ}-56.77'$, Long. $76^{\circ}-01.54'$, which was cleared by an effective depth of 52.5 feet on the present survey. The 50 feet which originated with H-4038 (1918) is considered disproved and should be disregarded.

The present survey was applied to the charts before verification and review. The following additional soundings (uncharted) were plotted during verification:

<u>Sounding</u>	<u>Charted Depths</u>	<u>Latitude</u>	<u>Longitude</u>
43.5 ft.	49 to 54 ft.	$36^{\circ}-56.7'$	$76^{\circ}-02.08'$ ✓
15 ft.	19 to 20 ft.	$37^{\circ}-01.1'$	$76^{\circ}-10.2'$ ✓

b. Aids to Navigation

Present survey positions of aids to navigation are in substantial agreement with the charted positions and adequately mark the features intended.

5. Condition of Survey

- The field records and Descriptive Report are complete and comprehensive.
- The field plotting was accurate.
- The 15-foot grounding in Lat. $37^{\circ}-01.1'$, Long. $76^{\circ}-10.2'$, rejected by the field party, was plotted on the smooth sheet in the Washington Office. A grounding at this spot also occurred at an effective depth of 18 feet. The apparent clearance by an effective depth of 18 feet, pos. 1 to 7 F, is probably faulty.

- d. The following reported obstructions (not charted) were disproved by the present survey: (Item numbers correspond to items in the Project Instructions.)

	<u>Latitude</u>	<u>Longitude</u>	<u>Source</u>
Item 7	36°-59.1'	76°-03.1'	N to M 11(1944)
Item 8	37°-01.0'	76°-02.8'	N to M 29(1944)←
Item 9	37°-00.8'	76°-11.1'	N to M 22(1943)
Item 10	37°-08.5'	76°-12.0'	N to M 40(1943)
Item 20	36°-57.0'	76°-01.3'	N to M 31(1944) (wreck)

- e. Item 20: Wrecks (charted) in Lat. 36°-57.55', Long. 76°-01.3' and Lat. 36°-57.63', Long. 76°-00.65', were cleared by effective depths of 40 feet and 37½ feet respectively.

- f. Item 21: The wreck of the schooner A. ERNEST MILLS charted in Lat. 36°-55.4', Long. 76°-04.6', from H-4924 (1929) and chart letter 5 (1945), was not conclusively disproved by the present survey and should be retained on the chart as a sunken wreck E.D. of 1/14/55. The wreck falls about 80 meters within the eastern limit of the dragged area. More complete wire drag coverage was prevented by numerous fish stakes in this vicinity.

See Review
Adm 1950
See note
of 1/14/55
P. 3 in
front of
this Deck.

A small area in the vicinity of the wreck was also covered by closely-spaced sounding lines on H-7089 (1946). The coverage, however, is not of sufficient extent to disprove the existence of the wreck.

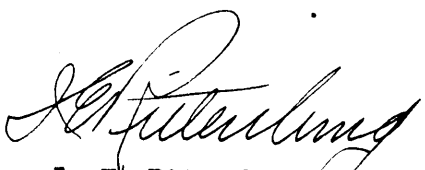
6. Compliance with the Project Instructions

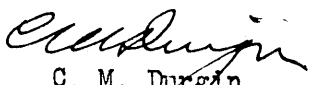
The present survey adequately complies with the Project Instructions except as indicated in the preceding paragraph 5 f.


7. Additional Field Work Recommended


More extensive wire drag coverage in the vicinity of the wreck charted in Lat. 36°-55.4', Long. 76°-04.6', is desirable. This work should await a time when the fish stakes in this area have been removed.

Examined and approved:


I. E. Rittenburg
Chief, Nautical Chart Branch


C. M. Durgin
Chief, Division of Charts

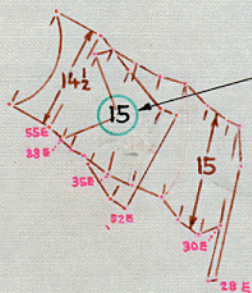

K. G. Crosby
Chief, Section of Hydrography


C. K. Green
Chief, Division of Coastal Surveys

02' 12'

76° 10'

08' 02'



sounding 20 feet
cleared by 14 1/2 feet

37° 00'



37° 00'

58' 12'

76° 10'

58' 08'

OVERLAY NO. 4

SUPPLEMENT TO SMOOTH SHEET H-7028 W.D.
FOR ITEM NO. 9

NAUTICAL CHARTS BRANCH

SURVEY NO. H7028 WIRE DRAG

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
10/16/45	78	JHE	Before After Verification and Review * (see below)
11-5-'45	1222	P.H.A.	Before After Verification and Review <i>Critical</i> <i>clearance depths applied.*</i>
11-9-45	481		Before After Verification and Review <i>Partially applied</i> * (see below)
8-1-46	494	J.M.A.	Before After Verification and Review <i>no correction</i>
8-1-46	78	J.M.A.	Before After Verification and Review <i>no additional correction</i> <i>Add 43 & 47 north of Cape Henry</i> <i>J.M.A.</i>
3/5/48	1222	J.A.M. Gunn	Before After Verification and Review <i>Completely applied.</i>
6/10/48	481	H.S. MacSwan	Before After Verification and Review <i>completely</i>
1-29-51	494	J.N. Eaton	Before After Verification and Review
8-16-54	<i>Reconstr.</i> 494	J.M.A.	Before After Verification and Review <i>no correction</i> <i>only 1 item falls on area of 494</i>
8/16/56	<i>Reconstr.</i> 481	<i>Ed. Shaw</i>	Before After Verification and Review * Changed charted 137 & 139 just north of Cape Henry to 140 & 137 respectively on chart 78 + 1222 + 481

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

7028

WIRE DRAG

Additional work

Diag. Cht. No. 1222-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey WIRE DRAG

Field No. PBS-2150-WD Office No. H-7028W.D. Ad.W.

LOCALITY

State VIRGINIA

General locality LOWER CHESAPEAKE BAY

Locality OFF LYNNHAVEN ROADS

194 50

CHIEF OF PARTY

G.R. FISH

LIBRARY & ARCHIVES

DATE 9 JANUARY 1951

8-1870-1 (1)

7028
WIRE DRAG

Additional work

DESCRIPTIVE REPORT
TO ACCOMPANY H-7028 (Ad.Wk.1950)

WIRE DRAG SURVEY FIELD SHEET NO.

(PBS-2150, WD)

Ships PARKER, BOWEN & STIRNI

Comdr. G. R. Fish
Chief of Party

AUTHORITY

This wire drag survey was made as part of a project of Hydrography in Lower Chesapeake Bay, covered by Supplemental Instructions for Project CS-326, dated 26 July 1950.

DATE OF SURVEY

This wire drag survey was made on 5 May 1950.

SCOPE

This wire drag survey was made to supplement a previous wire drag survey made to disprove a wreck charted in latitude $36^{\circ} 55.5'$, longitude $76^{\circ} 04.6'$.

The survey was made in accordance with the procedure outlined in the Wire Drag Manual and Supplemental Instructions for Project CS-326, dated 5 March 1948.

CONTROL

Visual fixes on natural objects previously located were used to control all positions on this sheet. Following is a list of signals used:

CASE - [REDACTED]
CAST - [REDACTED]
HEN - CAPE HENRY LIGHTHOUSE, 1887, 1932
HOT - HYGEIA INN, 1929
NOR - Bridge Counter Balance, Northerly of 2, at Lynnhaven Inlet (Topo location by Southeastern District Office)

SURVEY METHODS

Standard dual control methods were used. The positions of the end buoys were plotted from the ship positions by using sextant cuts taken on each position and the length of the towline in meters. The length of the towline, in meters, used for plotting purposes was the length of ground wire, in feet, between the towing bridle and the end buoy, plus 100 feet, and the sum multiplied by 0.3. Thus when 500 feet of ground wire was used the length of towline for plotting purposes was 180 meters.

DECLASSIFIED BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3(a), EXECUTIVE ORDER 12356

Tests for lift were made by the Tender using a graduated lead filled pipe, 3/4" x 10 feet long, attached to a graduated airplane cord and suspended from a small float on which a buoy reel was mounted. The pipe was coated with a mixture of white lead and oil to accurately determine the point of contact with the ground wire. Tests for lift were taken as soon as the drag was towing smoothly and were repeated as thought necessary to take care of changing conditions.

Changing the depth of the upright setting while the drag is in the water is too cumbersome with a Tender the size of the STIRNI and it was found more expedient to take in the drag, reset the uprights aboard ship and put the drag out again. This was no handicap when clearing wrecks but in searching for wrecks or obstructions it meant that in areas of uneven bottom the uprights sometimes had to be set at depths which allowed the drag to ground in ^{the} shoaler areas. No difficulty was experienced in towing the grounded drag except where the shoal spot was in the middle of the drag and the water depth was considerably less than the upright setting.

FIELD OPERATIONS

The previous wire drag survey did not cover by wire drag the area east of the plotted position of the wreck due to fish stakes in the area. In May 1950 there was a fish trap about 250 yards southeast of the plotted position of the wreck. North of the end of the fish trap there was a broken off fish stake with the top about even with the water surface. It was not advisable to take the large wire drag vessel into this area and there was no opportunity to complete wire dragging the area outside the limits of the fish trap with launches.

RECORDS

Drag settings were based on predicted tides for Hampton Roads, Virginia, corrected for time and height on information obtained from the Washington office. Actual tides were furnished by the Washington office and were used to process the records. In this report all references to effective depths, unless otherwise specified, are those indicated in the record books.

Bar checks were taken to obtain fathometer corrections for the several vessels. The corrections obtained have been applied to the soundings recorded in the records.

Tide reducers and lifts have been entered to the nearest 0.5 foot and checked. Drag strip diagrams showing effective depth in integral feet have been drawn and checked in the record books.

TIDES

Tide gages were not maintained by this party. Hourly heights were furnished by the Washington office from the Hampton Roads tide gage and were used in processing the records. A time correction of minus 45 minutes and a high water correction of plus 0.3 foot was applied to the observed tides.

OBSTRUCTIONS, CLEARANCES, DISCREPANCIES, ETC.

A special report was written for this wreck at the time the field work was done and a copy of this report is attached to and becomes a part of this report. *C.L. 311 (1950)*

An obstruction data sheet showing the minimum hang and maximum clearance and based on the final corrections is included in this report and the values therein take precedence over the values listed in the special reports.

RECOMMENDATIONS

The fish trap now located southeast of the charted position of this wreck appears to be maintained from year to year. The presence of this trap and the possible presence of broken off fish stakes will prohibit wire dragging this part of the area within one-half mile of the charted position of the wreck.

It is recommended that the charted wreck symbol either be deleted from the charts or moved eastward so as to lie within the limits of the fish trap area. *Not deleted nor moved.*

Moved as recommended on chart 1222

G R Fish

G. R. Fish

Commander, USC&GS

Comdg. Ships PARKER, BOWEN & STIRNI

For position see R 3 of review.

Jan. 14, 1955

Comdr. Fish stated that the area surrounding the present charted position of ED wreck is so foul with broken off fish trap stakes that navigation therein is very hazardous and further wire drag investigation is impractical.

In view of previous recommendations by the C.O. and reviewer the wreck will be removed from the charts in an effort to avoid the possibility of sending a vessel into the area, in the future, for further investigation.

1 Deleted from 481 2. June 55 HSM.

*H. Engelbrecht
for Mr. Edmonson*

1 Deleted from 1222 30 June 1955 L.S.S.

OBSTRUCTION DATA SHEET
SURVEY NO. PBS 2150, WD

LOCATION	GENERAL DEPTH FEET	FATH.SDG. ON WRECK FEET	MINIMUM HANG FEET	POSITION NUMBER	MAXIMUM CLEARANCE FEET	POSITION NUMBER	CHARACTER OF OBSTRUCTION	REMARKS
Lat. 36 -55 -32.5 Long. 76 -04 -05.0	27	None Obtained	19 ✓	15A	16 ✓	17-22A	Charted ED on Chart 481	

AW015
11/19/84
msm

H-7028 (Ad. Wk. 1950)
STATISTICS FOR SHEET NO _____ (PBS-WD-2150)
Ships PARKER, BOWEN, STIRNI (Project CS-326)

<u>Date</u>	<u>Day Letter</u>	<u>Stat.Mi. Dragged</u>	<u>Number Positions</u>	<u>No. H.L.</u>	<u>Soundings Fathometer</u>
5 May	A	2.0	23	None	None
Totals		2.0	23	None	None

Total square statute miles of area dragged, 0.65 square statute miles.

[REDACTED]
LIST OF SIGNALS1945 1950

MATE (CASE) - - - - - Casemate (U.S.E.), 1939
NITE (CAST) - - - - - Granite Tower C, (U.S.E.), 1939
GRAN (ABLE) - - - - - Granite Tower A, (U.S.E.), 1925, 39
BET (BAKER) - - - - - Granite B, (U.S.E.), 1939
SON - - - - - Emerson A, (U.S.E.), 1925, 39
PAR - - - - - Parcel C, Tower A, (U.S.E.), 1939

**DECLASSIFIED BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3(a), EXECUTIVE ORDER 12356.**

418 Post Office Bldg., Norfolk, Virginia

10 May 1950

To: The Director
U. S. Coast & Geodetic Survey
Washington, D. C.

Subject: Obstruction in Lynnhaven Roads, Lower Chesapeake Bay.

A wreck symbol (ED) is charted in latitude $36^{\circ} - 55.4'$, longitude $76^{\circ} - 04.6'$. The area west of the wreck symbol was wire dragged during a previous survey. On 5 May 1950 the area northeast of the wreck symbol was wire dragged to an effective depth of 22 feet and an obstruction was located in latitude $36^{\circ} - 55' - 32.5''$, longitude $76^{\circ} - 04' - 05.0''$. A wire drag set to an effective depth of 19 feet hung the obstruction. Depths are based on predicted tides for the vicinity.

The obstruction is small, neither a fathometer or lead line sounding could be obtained. The ground wire was well hung at 22 feet but cleared easily at 19 feet.

16 (revised)

It is recommended that the present wreck symbol (ED) be removed from the charts. Further dragging in the area is inadvisable due to a fish trap about 1/8 mile to the southeast of the wreck symbol and the presence of broken off stakes.

It is recommended that an obstruction of 17 feet be charted in the location listed.

revised to 16 1/2 ft. from actual tide reducers

G. R. Fish
Comdr., C&GS
Comdg. Ships PARKER, BOWEN, STIRNI

cc: Supervisor, SE District
Norfolk, Va.

*Advance information
Recorded as L. 311 (1950)
MA*

*AWOIS
11/19/84
MSM*

See page 3

*See review
TP 3*

RHC
12.

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

16 January 1951

Division of Charts: R. H. Carstens

Plane of reference approved in 3
volumes of sounding ~~records for~~ and wire drag records for

HYDROGRAPHIC SHEET 7028 Additional Work

Locality Off Lynhaven Roads, Lower Chesapeake Bay

Chief of Party: G. R. Fish in 1950

Plane of reference is mean low water, reading

3.6 ft. on tide staff at Hampton Roads (N.C.E.)

13.4 ft. below B. M. 6 (1927)

Height of mean high water above plane of reference is 2.5 feet.

Condition of records satisfactory except as noted below:

E. C. McKay

Section

Chief, ~~Division of Tides and Currents.~~

GEOGRAPHIC NAMES
Survey No. H-7028 W.D. Ad. Wk. ~~2~~

GEOGRAPHIC NAMES
Survey No. H-7028 W.D. Ad. Wk. ~~2~~

GEOGRAPHIC NAMES										
Survey No. H-7028 W.D. Ad.Wk.										
Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	7,
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M 234-

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7028 W.D. Ad.Wk.

Records accompanying survey:

Boat sheets .2...; sounding vols. .1...; wire drag vols. 2....;
bomb vols.; graphic recorder rolls;
special reports, etc.
.....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.....	23
Number of positions checked ^{plotted}	.....	do
Number of positions revised	.....	0
Number of soundings revised (refers to depth only)	.....	—
Number of soundings erroneously spaced	.....	—
Number of signals erroneously plotted or transferred	.....	—
Topographic details	Time	.....
Junctions	Time	.....
Verification of soundings from graphic record	Time	.....

Plotted
Verification by *J.A. Winsmore* Total time .10 hrs. Date 4/25/51

Reviewed by *J.A. Winsmore* Time .5 hrs. Date 4/26/51

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7028W.D.

Ad. Wk. 1950

FIELD NO. PBS-2150-W.D.

Virginia, Lower Chesapeake Bay, Lynnhaven Roads
Surveyed on May 5, 1950
Project No. CS-326

Scale 1:40,000

Soundings:

Control:

None

Sextant fixes on shore signals

Chief of Party - G. R. Fish
Surveyed by - G. R. Fish
Protracted by - T. A. Dinsmore
Soundings plotted by - None
Verified and inked by - T. A. Dinsmore
Reviewed by - T. A. Dinsmore, 26 April 1951
Inspected by - R. H. Carstens

1. Purpose

The purpose of this additional work was to verify or disprove the existence of the sunken wreck (E.D.) charted in lat. $36^{\circ} 55.38'$, long. $76^{\circ} 04.63'$. Although previous wire dragging had cleared the charted position of the wreck with an effective drag depth of 18 feet, the prior coverage was not considered of sufficient extent to conclusively disprove the existence of the wreck.

2. Scope and Results

The additional work covers an area of about three-fourths square mile northeast of the charted wreck. This coverage is not as extensive as was contemplated. The continued presence of fish traps precluded wire dragging the area immediately east of the charted position of the wreck. However, about one-half mile east of the charted wreck, the present work revealed an obstruction in lat. $36^{\circ} 55.54'$, long. $76^{\circ} 04.08'$, which was hung at a minimum effective depth of 19 feet and cleared by a maximum effective depth of 16 feet. The general depths in the vicinity of the obstruction are 26-27 feet. Although the nature of the obstruction was not ascertained, its extent was determined to be small inasmuch as attempts to obtain either a fathometer or handlead sounding on it were unsuccessful.

3. Recommendations

In concurrence with the Chief of Party, it is recommended that the sunken wreck symbol (E.D.) be removed from the charts or moved eastward so as to lie within the undragged fish stake area. moved to Lat. $36^{\circ}55'26''$ Long. $76^{\circ}04'27.4''$ *See Page 3. for detail comment 1/14/55 JRS*

The obstruction revealed on this survey has been charted on Chart 481 (print date 12/25/50) from advance information of the present survey (C.L. 311, 1950) as having been cleared by 17 feet. The clearance depth should now be revised to 16 feet. The correct clearance depth has been charted on H.O. 11940 (25-1). *J.M.A.*

11.

SURVEY NO. H-7028 W.D. Ad.Wk. 1950

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

H. 7028 W. D. (Ad wk. 1950)

Record of Application to Charts

See page 3
of D.R. 155.

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.